## Claims:

What is claimed is:

1. A method for managing resources in a data processing system, said method comprising:

defining at least one type of resource, together with a quantity associated with that type of resource, said quantity being indicative of resource capacity, said type of resource being selected from the group consisting of hardware level resources, operating system level resources and application level resources;

determining whether a user has requested use of said at least one resource;

determining availability of said requested resource as to type and quantity;

dispatching a user job which requests said resource upon the condition that said resource is available in the type and quantity requested.

- 2. The method of claim 1 in which said hardware level resources are selected from the group consisting of CPUs and random access memory.
- 3. The method of claim 1 in which said operating system level resource is virtual memory.
- 4. A method for providing a user with control of a data processing system, said method comprising the steps of:
  - analyzing user supplied command statements which provide access to resources having internal resource models, said resource models including, for each resource, a type and a quantity description, wherein at least one resource model is defined consistently across multiple data processing system levels; and

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interpreting said command statements so that user jobs are scheduled to run and to use resources specified by said command statements.